## 100-2 Preliminary Syllabus, Da-Yeh Univ

Information					
Title	藥用植物組織培養與實習	Serial No. / ID	0364 / MHI3017		
Dept.	藥用植物與保健學系	School System / Class	大學日間部3年1班		
Lecturer	何偉真	Full or Part-time	專任		
Required / Credit	Optinal / 3	Graduate Class	No		
Time / Place	(—)5678 / N218	Language	Chinese		

## Introduction

Plant tissue culture is a widely applied collection of techniques which have been used in plant propagation, breeding, healthy plantlet production, and plant physiological, pathological as well as genetical researches, etc..

This course is designed to let students learn fundamental theories and applications of plant tissue cultures techniques including plant organ, tissue and protoplast culture technique, organogenesis/embryogenesis in culture systems. The applications in plant propagation, virus-free plant production, monoploid breeding, mutation breeding, somatic hybridization, production of secondary metabolites and genetic engeneering are also mentioned.

## Outline

W1 Introduction of plant tissue culture(PTC) and lab safty

W2 PTC culture room design

W3 PTC materials and lab procedures

W4 PTC media preparation

W5 Aseptic culture technique

W6 Callus induction

W7 Shoot tip culture

W8 Vegetative propagation (1)

W9 Vegetative propagation (2)

W10 Cell suspension culture

W11 Plant hardening for in vitro plants

W12 Leaf culture

W13 Embryo culture

W14 Visiting

W15 Student report

W16 Student report

W17 Home work turn in

W18 Final examination

## Prerequisite

Biology or Botany						